

REMARKS

Claims 1 and 3-13 are pending. Claims 1 and 3 have been amended. Claim 2 has been cancelled. Claims 7-13 are newly presented. Reconsideration and allowance of the present application based on the following remarks are respectfully requested.

Applicants respectfully request entry of this response as no new issues are raised by this response and it places the application in condition for allowance or at least in better form for appeal.

Claim Rejections Under 35 U.S.C. § 102

Claims 1 and 2 were rejected under 35 U.S.C. § 102(b) over Suzuki et al. (U.S. Patent No. 5,416,338) and claims 1, 5, and 6 were rejected under 35 U.S.C. § 102(b) over Fujii (U.S. Patent No. 5,822,348). Applicants respectfully traverse these rejections.

Claim 1 recites, in part, An electro-absorption optical modulator that includes at least two quantum wells including a first quantum well having a narrow width and a second quantum well having a wide width. The first quantum well has an α value that is larger than that of an α value of the second quantum well. In contrast, Suzuki and Fujii are silent regarding an α value. Accordingly, neither Suzuki or Fujii teach or suggest a first quantum well having an α value that is larger than an α value of the second quantum well, as recited in claim 1.

Claims 2, 5 and 6 are believed allowable for at least the reasons presented above with respect to claim 1 by virtue of their dependence upon claim 1. Accordingly, Applicants respectfully request reconsideration and withdrawal of these rejections.

Allowable Subject Matter and New Claims

Applicants appreciate the Examiner's indication that claims 3 and 4 contained allowable subject matter and would be allowable if rewritten in independent form to include of the features of their respective base claims and any intervening claims. Accordingly, Applicants have added new claims 7-13 which are believed allowable for at least the reasons presented above.

Conclusion

Therefore, all objections and rejections having been addressed, it is respectfully submitted that the present application is in a condition for allowance and a Notice to that effect is earnestly solicited.

Application No. 10/743,463
Amendment dated May 4, 2005
Page 6

Should any issues remain unresolved, the Examiner is encouraged to contact the undersigned attorney for Applicants at the telephone number indicated below in order to expeditiously resolve any remaining issues.

Respectfully submitted,

MAYER BROWN ROWE & MAW LLP

By:


Yoon S. Ham
Registration No. 45,307
Direct No. (202) 263-3280

YSH/VVK

Intellectual Property Group
1909 K Street, N.W.
Washington, D.C. 20006-1101
(202) 263-3000 Telephone
(202) 263-3300 Facsimile

Date: May 4, 2005